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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/584,764	05/30/2000	Bunsen Y. Wong	MM0011	1163

7590

10/27/2003

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EXAMINER
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RICKMAN, HOLLY C

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 10/27/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/584,764

Applicant(s)

WONG ET AL.

Examiner

Holly Rickman

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1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 21-28, 30 and 51-60 is/are allowed.
- 6) ☒ Claim(s) 11-20 and 31-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Applicant's Appeal Brief filed 8/8/03 has been fully considered. Applicant's arguments are persuasive with respect to the rejections of the claims under 35 USC 102 and 35 USC 103.

However, prosecution is hereby reopened in view of the newly discovered reference to Chen et al., applied below.

#### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 11-20, 29 and 31-50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification as originally filed fails to provide support for the claimed *concept* of a second alloy composition excluding boron. In addition, the specification as originally filed fails to provide support for the claimed *concept* of a second magnetic layer composition having a boron concentration less than or equal to that of the first magnetic alloy layer composition.

Two examples are provided wherein the second magnetic layer does not contain boron. However, this merely indicates that Applicant has support for a structure having those specific

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alloy compositions. These examples would not suggest to one of ordinary skill in the art that Applicant's had possession of the claimed concept, that is, the absence of boron in the second alloy composition. There are numerous elements that are not present in the exemplified compositions and there is no indication to one of ordinary skill in the art that boron is the element that must be absent or present in a specific amount relative to the first layer. See *Ex parte Grasselli*, 231 USPQ 393 (BPAI 1983).

***Claim Rejections - 35 USC § 102/103***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The rejection of claims 21-22, 27, and 29-30 under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bian et al. (US 6143388) is withdrawn in view of Applicant's arguments set forth in paper no.15.

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7. Claims 11-13, 18-20, 31-33, 40-43 and 49-50 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Chen et al. (US 6168861).

Chen et al. disclose a magnetic recording medium having a substrate, a seedlayer, an underlayer, a first magnetic layer formed from Co<sub>15</sub>Cr<sub>8</sub>Pt<sub>4</sub>Ta and a second magnetic layer formed from Co<sub>15</sub>Cr<sub>11</sub>Pt<sub>4</sub>Ta, a protective overcoat and a lubricant layer thereon (see abstract; claims 1,3,6-7,12,16,17-18). The reference teaches that each of the layers has a different coercivity and remanence and teaches that the medium containing the dual magnetic layer structure has a higher coercivity than that of a medium comprising an individual magnetic layer alone (col. 6, lines 60-66). The reference does not disclose the relationship between the overall coercivity of the medium and the relative thickness of the first magnetic layer to the total magnetic layer thickness.

It is the Examiner's contention that the structure taught by Chen et al. inherently satisfies the limitation directed to this relationship by virtue of the fact that two magnetic layers having different compositions and coercivities and an overall coercivity that is higher than the individual coercivities. From Applicant's disclosure it is apparent that the aforementioned relationship between the coercivity of the medium and that of the individual layers is a result of the claimed thickness relationship. Therefore, one of ordinary skill in the art would reasonably expect that the coercivity relationships disclosed by Chen et al. would be a result of the same thickness relationship.

***Claim Rejections - 35 USC § 103***

8. The rejection of claims 23 and 28 under 35 U.S.C. 103(a) as being unpatentable over Bian et al. (US 6143388) is withdrawn in view of Applicant's arguments set forth in paper no. 15.

***Allowable Subject Matter***

9. Claims 1-10, 21-28, 30 and 51-60 are allowable over the prior art.
10. Claims 21-28 are allowable over the closest prior art to Chen et al. (US 6168861). Chen et al. fail to teach or suggest the claimed relationship between the percentage change in coercivity and the percentage change in remanence.

***Response to Arguments***

11. Applicant's arguments filed 8/8/03 have been considered but are moot in view of the new grounds of rejection.
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Holly Rickman whose telephone number is (703) 305-2642. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (703) 308-2367. The fax phone numbers for the

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organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Holly Rickman  
Primary Examiner  
Art Unit 1773

hcr  
October 15, 2003